

SVNP NEWSLETTER, MARCH, 2025

INCLUDING MINUTES OF THE MARCH 13 MEETING

There are currently opportunities to give presentations starting as soon as June, 2025. As usual, any suggestions you may have for programs – especially of a how-to nature – would be appreciated. Please email (wah@waynehallphotography.com) or call (978-443-9226) Wayne if you are willing to give a presentation yourself or if you know of someone to recommend.

This meeting was held in person in the Great Room at Newbury Court.

The Evening's Presentation - Marsha Wilcox

Marsha started her presentation, titled *Ancient Light*, with a quote from the eminent Jewish theologian Rabbi Abraham Joshua Heschel: "Our goal should be to live life in radical amazement...get up in the morning and look at the world in a way that takes nothing for granted. Everything is phenomenal; everything is incredible."

Marsha credits this outlook as a major impetus for engaging in astrophotography. What we see when we look at the night sky may be absolutely basic to our existence but it's far enough removed from our daily experience to be truly alien. In other words, seeing it without wonder should approach being impossible.

On a more down-to-earth level, Marsha introduced us to her gear. This started with a trailer adapted to carry it all - the astrophotographer's version of a nature photographer's camera bag. Some featured equipment includes a heavy-duty tripod, motorized, computer-equipped equatorial mount, telescope, camera (cooled to -20C), cooling equipment, and, of course, a battery bank (to enable a full-night's-worth of individual exposures). Enough equipment, in fact, to guarantee Marsha's photographs won't be taken terribly far from the trailer.

An evening's photography session will often comprise equipment set up followed by target acquisition after which the exposures are started and continue under machine control. At this point the human can catch some sleep. An evening's exposures will later be culled and assembled into stacks for processing. The number

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of photons being collected in each exposure is relatively low and is accompanied by random phantom effects (which we call noise - mitigating this is the purpose of cooling the sensor). The more exposures that can be averaged together, the better the confidence that we can have that what remains visible was really there. What there is a lot of are galaxies, which are collections of gas, dust and stars.

A short list of galaxy images seen includes: The Virgo Cluster, ~53 million light years distant; many, many galaxies, many of which are thousands or millions of light years distant; much closer than that, the Andromeda galaxy, a close neighbor only 2.4 million light years away; Messier 106; some examples of the grand design spiral galaxy; starburst galaxies characterized by hydrogen ejected.

Many of these galaxies had formerly been classed as nebulae, which Marsha suggested can be thought of as beautiful dust. Nebula was an early catch-all term used to differentiate soft blobs of light from point sources before galaxies and such were identified for what they are. Even with the removal of galaxies from the classification of nebulae, there are plenty of those left. Many of them have fanciful names suggested from their shapes: PacMan, Heart, Tulip, Elephant's trunk, Bubble, Veil. One, the Skull and Crossbones nebula, was a special project of Marsha's. For one project she teamed up with a fellow astrophotographer in - wait for it - Australia to photograph this object for a short season over a series of evenings. They then pooled their images, thus achieving a stack double the size that they would have been able to create individually over the same span. With good weather, they could photograph the object every twelve hours rather than every twenty-four.

Some real magic takes place in the processing of the images which have been taken with a variety of specialized filters to isolate the wavelengths of light associated with different elements. These different exposures then become the basis for the colorful images that are the normal output for astrophotographers.

The evening went quickly. Throughout, Marsha was a wonderfully companionable guide to her chosen avocation, which is

nature photography on a totally different scale than we normally attempt and with a language all its own. Her answers to the many questions she encouraged to be asked during the course of the evening invariably started with the words, "Good question!" In the spirit of Rabbi Heschel, Marsha left us with the thought that, for her, "What amazes me is what is out there that we can't see." OK, understood. But, to her auditors, what we could see was amazing enough!

Across the Web

Quite fortuitously, given the evening's subject matter, Ian Lauer has produced a video that deals in an engaging manner with some of the problems faced by those who would photograph the night sky. The difference is that this video hits much closer to home, dealing with the next planet, but one. It is titled *What Happens When You Stack 29,965 Photos of Jupiter?* I came away from its modest run time (12' 29") feeling better informed than usual.

<https://youtu.be/DG5M0xQVzJ4>

A day or two later, through the miracle of the YouTube algorithm, I was served another, more on-topic video by the same author, this time covering the basic mechanics of photographing galaxies. This video, *Photographing a Galaxy for 10 Seconds vs 10 Hours*, is even more brief (9' 50") and will give an idea of the sort of material with which we were presented tonight.

<https://youtu.be/Gs8iGuyocCs>



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April 10 Jean Fain & Costa Rica
Nicole Mordecai

May 8	TBA
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Please Note - All meetings are held on the 2nd Thursday of the month, at 7:00 pm, either via Zoom or at our location (or both):

Great Room, Newbury Court
100 Newbury Court, Concord, MA

[http://svnp.homestead.com/files/Directions to Newbury Court Great Room.pdf](http://svnp.homestead.com/files/Directions%20to%20Newbury%20Court%20Great%20Room.pdf)

Group Exhibits

April, 2025 Betty Meyer Gallery, United Parish of
Auburndale, 64 Hancock St.,
Auburndale(Newton), MA

SVNP members - please notify Wayne Hall (wah@waynehallphotography.com) of your upcoming individual exhibits for posting on the SVNP website.

Date	Member	Exhibit Location
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An Invitation from your Editor

If having a meatier monthly read is of interest to you then, please, I invite you to send anything you may wish to contribute to future newsletters (a précis of an upcoming presentation, photos, personal news, reviews, neat tricks you find worth sharing, etc.) to me at henkbroekman@gmail.com. Please include SVNP in the subject line.

I especially invite presenters and members sharing images to select and submit files for illustrative purposes. I expect it would be possible to accommodate two images or so for main presenters and one each for after-presentation sharing. Generally, expect to see half-column layout along the lines of this example. If you have photos you may wish to share, please submit jpg files sized no smaller than 1200 px on the long side. Submission deadline will be 11:59 pm on the Monday following the meeting. Inclusion in any particular newsletter will be at my discretion based on newsletter length, distribution file weight, current workload, etc.

Hendrik Broekman



*Early Bird, Iceland;
photo, Hendrik Broekman*